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APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/063,868	05/21/2002	David Crist Gabriel	201-0268	2432		
22844	7590 10/01/2003					
	BAL TECHNOLOGIES	EXAMINER				
SUITE 600 - PARKLANE TOWERS EAST ONE PARKLANE BLVD.			RO, BENTSU			
DEARBORN,	MI 48126		ART UNIT	PAPER NUMBER		
			2837			
			DATE MAILED: 10/01/2003			

Please find below and/or attached an Office communication concerning this application or proceeding.

			Application N	lo.	Applicant(s)				
			10/063,868		GABRIEL ET AL.				
Office Action Summary		mary	Examiner		Art Unit				
			Bentsu Ro		2837				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply									
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status									
1)	Responsive to communic	ation(s) filed on	·						
2a) <u></u> ☐	This action is FINAL .	2b)⊠ Th	is action is nor	n-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.									
Disposition of Claims									
<i>,</i> —	Claim(s) 1-19 is/are pending in the application.								
	4a) Of the above claim(s) is/are withdrawn from consideration.								
·	5) Claim(s) 1-15 is/are allowed.								
·) Claim(s) <u>16-19</u> is/are rejected.								
•	Claim(s) is/are obje		- clastian resu	inamant					
8) Claim(s) are subject to restriction and/or election requirement. Application Papers									
9) The specification is objected to by the Examiner.									
•—	•	•		ected to by the Exar	miner.				
,	10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.									
If approved, corrected drawings are required in reply to this Office action.									
12)☐ The oath or declaration is objected to by the Examiner.									
Priority under 35 U.S.C. §§ 119 and 120									
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).									
a) ☐ All b) ☐ Some * c) ☐ None of:									
	1. Certified copies of the priority documents have been received.								
	2. Certified copies of the priority documents have been received in Application No								
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 									
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).									
a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.									
Attachment(s)									
1) Notic	e of References Cited (PTO-892) e of Draftsperson's Patent Drawin nation Disclosure Statement(s) (F	g Review (PTO-948)	4) 5) . 6)	Notice of Informal F	(PTO-413) Paper Not Patent Application (PTo				

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FIRST OFFICE ACTION

- 1. The following informality in the specification has been noted, correction is required:
 - Specification page 8 has insufficient upper margin, as a result, holes have been punched through the first line words. A substitute page 8 with sufficient upper margin is required.
- 2. Claim 4, 5, 9, 10, 11 are objected to because of the following informalities:
 - Claim 4, line 3, the recitation "said signal" is unclear. Claim 1 defines four different type of signals, one is on line 4 the "torque request signal", another one on line 6 "a signal", a third one on line 7 "a voltage signal" and a fourth one is on line 10 "a signal indicative of undesired torque generation". Thus which "said signal" is being referred is unclear.
 - Claim 5, line 1, the recitation "said signal" has the same problem as that of claim
 - Claim 9, lines 8-9, the recitation "said predetermined electrical current signal" lacks proper antecedent basis. Line 6 defines "an electrical current signal" not "a predetermined electrical current signal". Therefore, lines 8-9, the recitation "said predetermined electrical current signal" should be changed to --said electrical current signal-. Line 12, the recitation "said predetermined second value" should be changed to --said predetermined second voltage value--.
 - Claim 10, line 2, the recitation "said certain voltage value" and line 3, the recitation "said certain second voltage value" lack proper antecedent basis. Claim 9, line 5 defines "a predetermined voltage value", lines 9-10 defines "a predetermined second voltage value". Claim 9 sues the word "predetermined" not the word "certain".
 - Claim 11, line 2, the recitation "said certain voltage value" lacks proper antecedent basis for the same reason as that of claim 10.

Appropriate correction is required.

3. The drawings are objected to under 37 CAR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the audio generator (claim 7), the visual generator (claim 8), a light (claims 13, 18), a sound device (claims 14, 19) and a positive

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indication (claim 17) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claim 16 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by **Masters US Patent No. 4,910,447.**

Claim 16 reads onto Masters teaching as follows:

Claim 16:

A method for determining the existence of a certain operational state of an electric drive assembly

of the type which receives a certain torque request

Masters teaching:

Masters teaches a method and an apparatus for determining the existence of a certain operational state of an electric drive assembly;

Fig. 1 shows a motor 18, which is an electric drive assembly;

a certain operational state could read onto a failure of a component within power switch 16, see Fig. 2 and column 5, line 45-46;

Fig. 1 shows a potentiometer 131, the knob (not shown) connected to the wiper of potentiometer 131 is a device for receiving a certain torque request;

it is noted that the potentiometer 131 receives a speed setting from the user, the speed setting is related to motor current and motor torque, therefore, the speed setting is a certain torque request;

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and which uses said received certain torque request to produced a voltage command,

said method comprising the steps of

associating said torque request with a second voltage command;

ascertaining the existence of a certain operational state of said electric assembly based upon said comparison;

and automatically deactivating the electric drive assembly upon the ascertained existence of the certain operational state. the voltage at the wiper of the potentiometer 131 is a voltage command;

the back emf sensed at the terminal 17 of motor 18 is a second voltage command; it is noted that the back emf is related to the motor speed set signal; it is also noted that the back emf is a voltage command because the back emf associates with the motor speed; it is further noted that the back emf is a voltage command view from the voltage comparator 73;

the clamps relay 83, the SCRs 81, 82 and the associated circuit elements, shown in Fig. 1 the right hand side, all together "ascertain" the existence of a certain operational state; again, the certain operational state is the failure of a component within power switch 16, see column 5, lines 45-61;

see column 5, line 61 for the statement of motor shut down.

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masters in view of **Shacknow US Patent No. 3,585,477.**

Regarding claims 17-19, Masters does not teach an indication device. However, an indication device is taught by Shacknow.

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Shacknow Fig. 1 shows an alarm 17 for monitoring the failure of motor speed control device, see title. The alarm 17 obviously can be visual device or audio device.

In view of the Shacknow's teaching, it would have been obvious to a skilled person in the art to add such a monitoring device to the Masters motor control to achieve the same subject matter as claimed.

Why??? Adding such monitoring device will immediately and positively inform the motor user the failure of the motor drive device, thus, the problem can be immediately corrected by the user.

- 8. Claims 1-15 are allowable if the problems mentioned in paragraphs 1-3 above are alleviated.
- 9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- 10. Any inquiry concerning this communication should be directed to Bentsu Ro at telephone number 703 308-3656.

September 19, 2003

Primary Examiner